



The Role of Proximity, Water Quality, and Tradition in Selection of Drinking Water Source

Charlotte Smith, PhD
University of California – Berkeley
School of Public Health

Fifth High Level Forum on Global Geospatial
Information Management
Mexico City, Mexico
November 29, 2017

SDG Target 6.1: Drinking Water

By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.1.1: The population is using "safely managed drinking water services" (a source of drinking water source which is):

- Available when needed
- Accessible located on premises
- Acceptable free of fecal and priority chemical contamination

UN General Assembly Declaration 64/292

"...the human right to water and sanitation ... entitles everyone, without discrimination, to water and sanitation that is sufficient, safe, acceptable, physically accessible and affordable for personal and domestic uses"



The Human Right to Water

Availability

50 – 100 L/d for drinking & basic hygiene

Affordability

Water should not exceed 3% of household income

Accessibility

- Source should be within 1000 meters of home
- Collection time should be less than 30 minutes

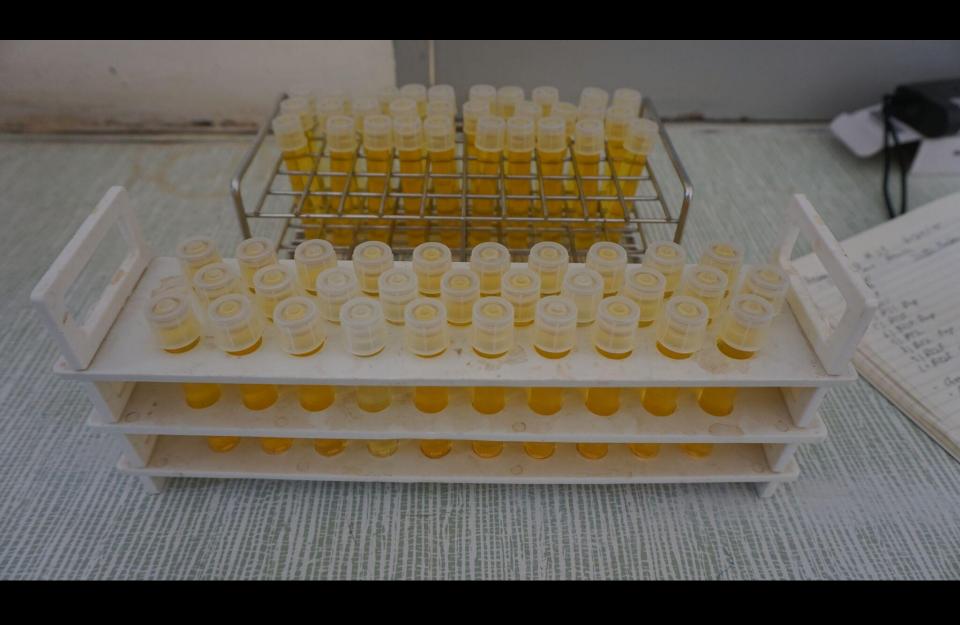
Acceptable quality

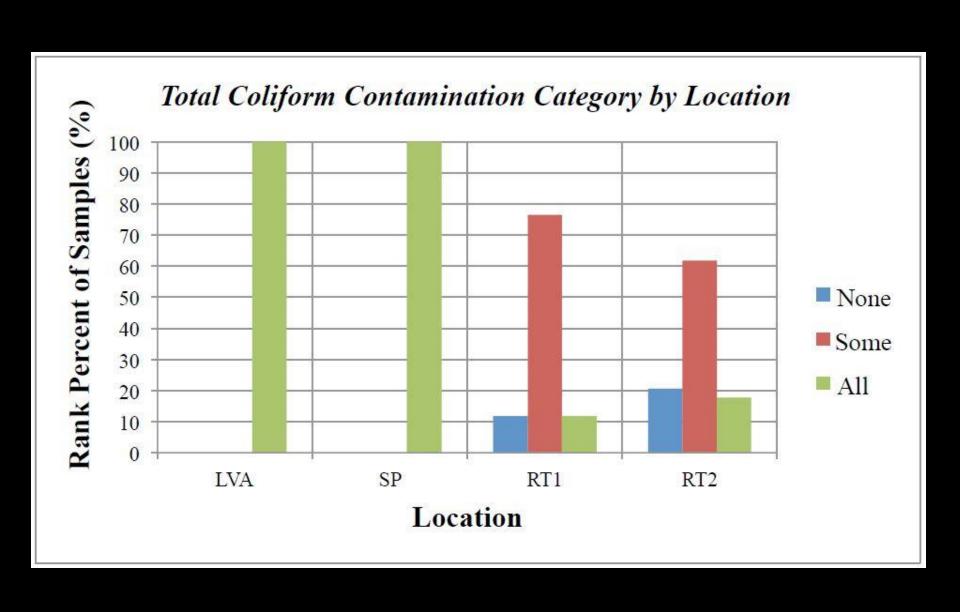
Free from contaminants. Acceptable color/odor/taste

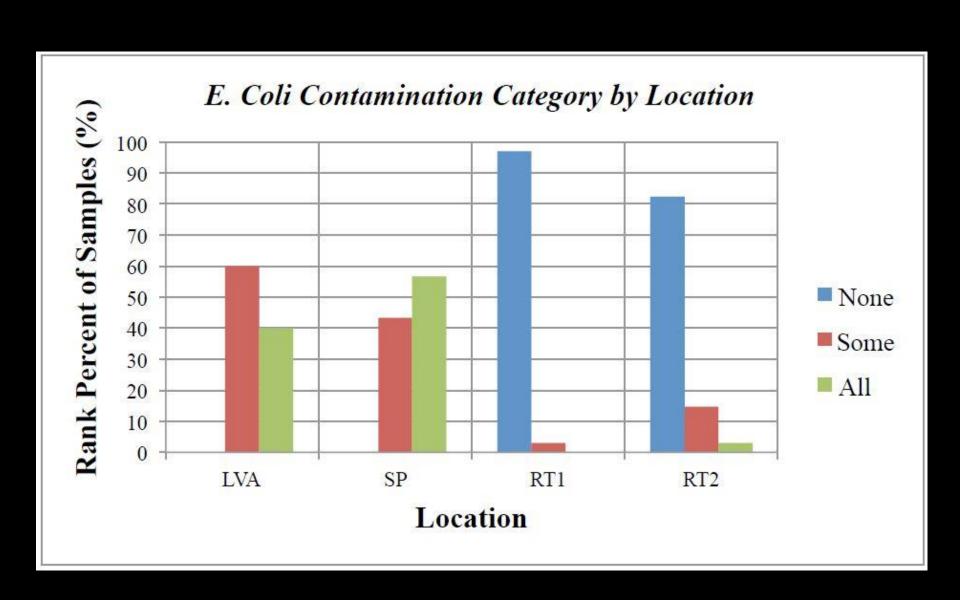


Water Source Options



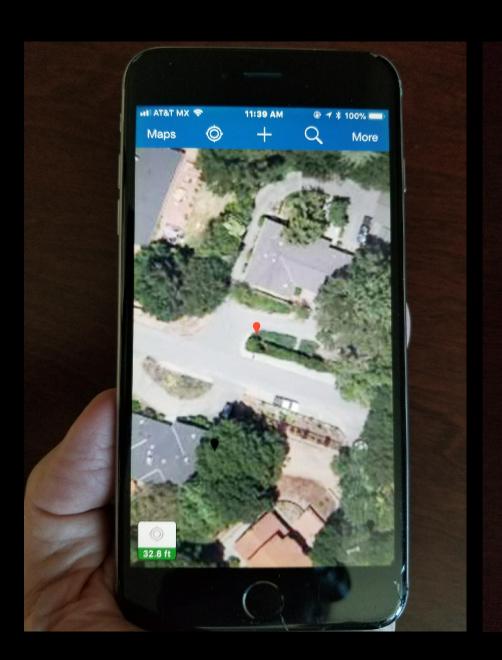


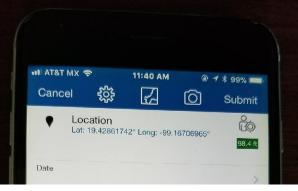




Rainwater Catchment Tanks (red arrows)







- Distance from home / school
- Perception of quality
- Availability
- Habit / tradition
- Opportunity for social interaction



